



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,255	07/02/2003	David R. Hall	66.0028-3	3332

38046 7590 06/13/2006

JEFFREY E. DALY
INTELLISERV, INC
400 N. SAM HOUSTON PARKWAY EAST
SUITE 900
HOUSTON, TX 77060

EXAMINER

YACOB, SISAY

ART UNIT PAPER NUMBER

2612

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,255

Applicant(s)

HALL ET AL.

Examiner

Sisay Yacob

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1 This communication is in response to applicant's amendment to first non-final office action, which was filed March 30, 2006.

2 An amendment to claims 1, 7, 8 and 11 have been entered and made of record in the application of Hall et al., for a "Transmission element for downhole drilling components" filed on July 02, 2003.

Claims 1, 7, 8 and 11 are amended.

Claims 2-6, 9, 10 and 12-15 are the same as originally filed.

New claims 16-21 are canceled.

Claims 1-15 are pending.

Response to Arguments

3 Applicant failed to show how the amendment overcomes the rejection of record.

Claim Rejections - 35 USC § 102

4 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5 The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6 Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent of Boyle et al., (6,866,306).

7 As to claims 1 and 11, Boyle et al., discloses a transmission element for transmitting information between downhole tools located on a drill string (Col. 1, lines 9-12), the transmission element comprising a torodial core constructed of a magnetically-conductive material (Col. 2, lines 41-67; Col. 3, lines 12-25) at least

Art Unit: 2612

one conductor helically coiled around the torodial core and electrically isolated therefrom (Col. 4, lines 29-31 Col. 7, lines 34-41; Item 41 of figures 1 and 2; Items 131, 141, 142, 151, 161 and 162 of figure 9), an annular housing constructed of an electrically conductive material (Item 54 of figure 1), and partially enclosing the torodial core and the at least one conductor (Item 58 of figure 1; Items 131 and 151 of figure 9), the annular housing further shaped to reside with an annular recess formed into a surface of a downhole tool (Col. 4, lines 23-67; See figure 1), and being electrically insulated from the surface thereof (Col. 6, lines 16-20), a biasing member to effect a bias between the annular housing and the annular recess (Item 62 of figure 1), urging the annular housing in a direction substantially perpendicular to the surface (Col. 5, lines 36-38).

8 As to claims 2 and 14, the transmission element of claims 1 and 11, further, Boyle et al., discloses a retention mechanism for retaining the annular housing within an annular recess (See figure and 2).

9 As to claim 3, the transmission element of claim 1, further, Boyle et al., discloses the at least one conductor is coated with an electrically insulating material (Col. 6, lines 16-20).

10 As to claim 4, the transmission element of claim 1, further, Boyle et al., discloses the surface is selected from the group consisting of a secondary

Art Unit: 2612

shoulder of a pin end (Item 22 of figure 1), a secondary shoulder of a box end (Item 21 of figure 1), a primary shoulder of a pin end (Item 61 of figure 1), and a primary shoulder of a box end of a downhole tool (Item 42 of figure 1).

11 As to claims 5 and 15, the transmission element of claims 1 and 11, further, Boyle et al., discloses the annular housing is at least partially exposed to the central bore of a downhole tool (Col. lines 44- 49).

12 As to claim 6, the transmission element of claim 1, further, Boyle et al., discloses the biasing member is selected from the group consisting of a metal spring, an elastomeric material, and an elastomeric-like material (Col. 7, lines 6-16; Col. 8, lines 13-16; Item 26 of figures 4 and 5).

13 As to claim 7, the transmission element of claim 1, further, Boyle et al., discloses the torodial core is characterized by an elongate cross-section (See figure 1, 2 and 9).

14 As to claim 8, the transmission element of claim 1, further, Boyle et al., discloses the torodial core has a cross-section characterized by a height at least twice that of its width (Col. 3, lines 48-54; See figures 8 and 9).

15 As to claim 9, the transmission element of claim 1, further, Boyle et al., discloses the annular housing that comprises a shoulder formed along the

Art Unit: 2612

exterior thereof, configured to engage a corresponding shoulder formed within an annular recess (Col. 5, lines 40-44; Items 71 and 72 of figure 4).

16 As to claim 10, the transmission element of claim 1, further, Boyle et al., discloses the annular housing is configured to make electrical contact with a second annular housing located on a second transmission element, and wherein the contact surfaces of each annular housing are formed to be self-cleaning (Col. 5, lines 40-46; See figure 4).

17 As to claim 12, the transmission element of claim 11, further, Boyle et al., discloses the means for effecting a bias between the annular housing and the annular recess is due to radial tension between surfaces of the annular housing and an annular recess (Col. 7, lines 35-67; See figure 9).

18 As to claim 13, the transmission element of claim 12, further, Boyle et al., discloses the radial tension between the surfaces of the annular housing and the annular recess are due to tension along at least one of the outside diameters, the inside diameters, and a combination thereof of the annular housing and annular recess (Col. 8, lines 16-28; See figure 10).

Conclusion

19 **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

20 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sisay Yacob whose telephone number is (571) 272-8562. The examiner can normally be reached on Monday through Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery A. Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

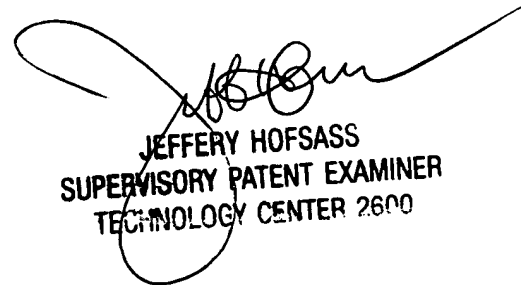
Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sisay Yacob

6/7/2006

S.Y.



JEFFERY HOFSSASS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600